California Debt & Investment Advisory Commission

Pension Obligation Bond Pre-Conference

September 12, 2004

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LEHMAN BROTHERS

Panel Participants

Overview	**Rob Larkins –** Senior Vice President, Lehman Brothers
Legal / Disclosure Issues	**Bill Deyo, Esq. –** Partner, Nixon Peabody
Case Studies:	**Jay Goldstone –** Finance Director, City of Pasadena **Geoff Davey –** CFO / Debt Manager, Sacramento County

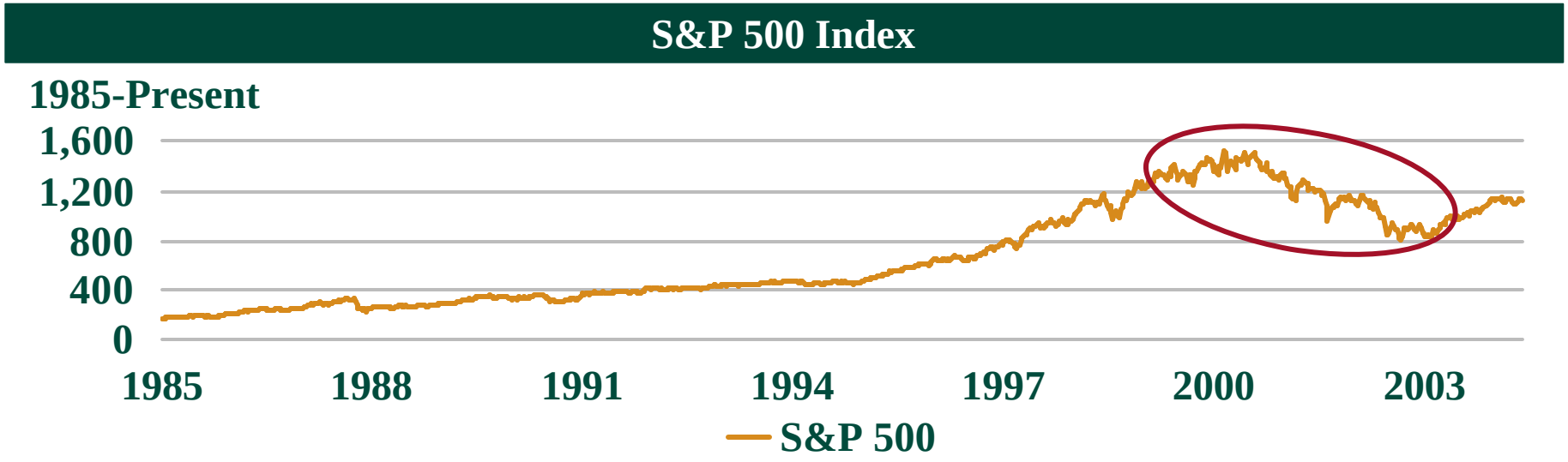
What Are POBs?

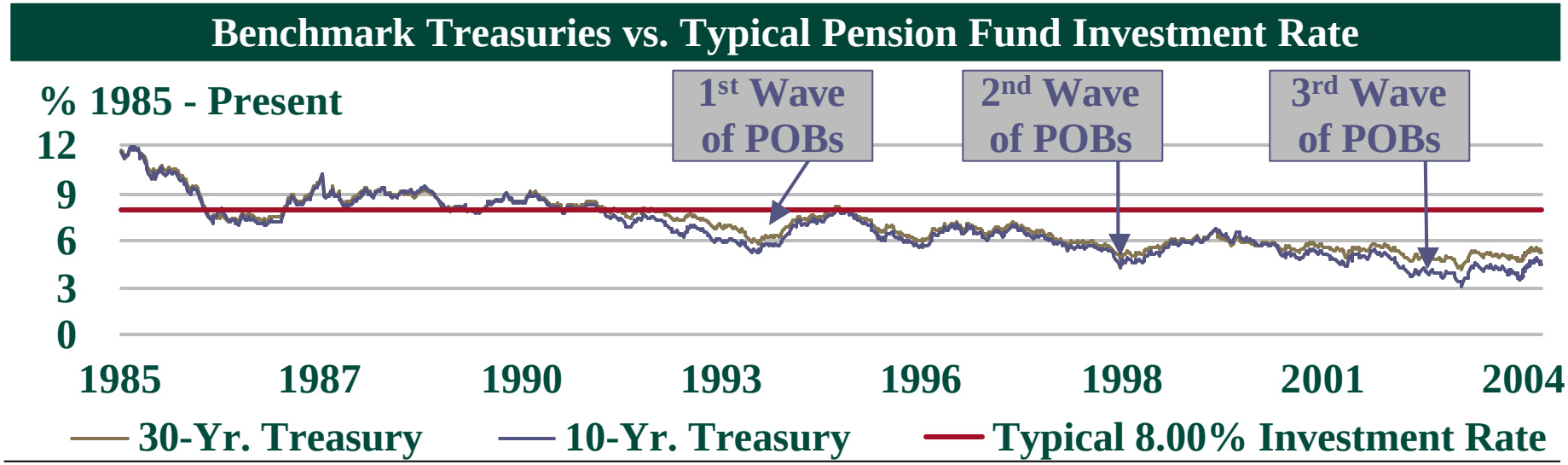
- Pension Obligation Bonds (POBs) are bonds issued by states and local municipalities (Plan Sponsors) to refund, in the capital markets, all or a portion of their Unfunded Actuarially Accrued Liabilities (UAAL)
- POBs are not issued by pension systems, nor are the pension systems liable for the bonds
- Plan Sponsors use bond proceeds to retire all or a portion of the UAAL, with savings resulting from the lower taxable bond market rates versus the pension system's actual earnings rate, which is effectively the Plan Sponsor's interest cost
  - Debt service derived from taxable bond market rates is lower than the actuarially projected employer's contribution that reflect the higher plan earnings assumption

Why Are POBs Back? – The “Perfect Storm”

- Reduced Portfolio Valuations
- Enhanced Retirement Benefits
- Historically Low Interest Rate Environment
- Widespread fiscal stress at all levels of government

Why Are POBs Back?

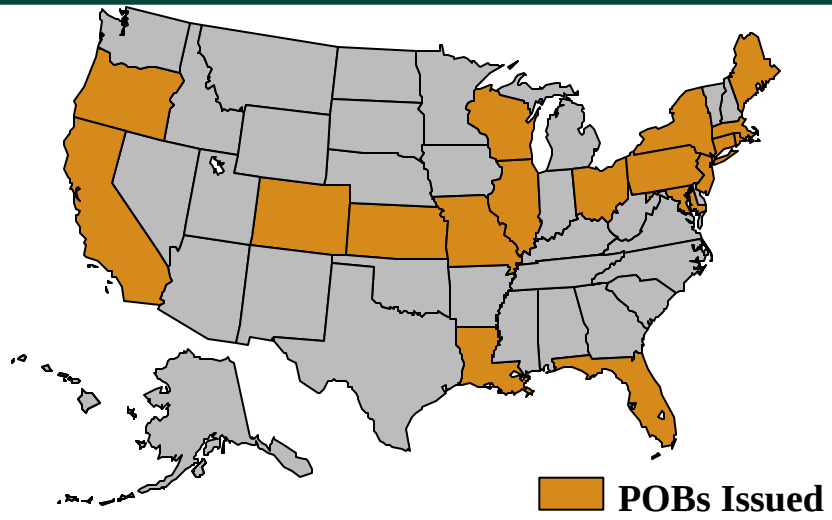




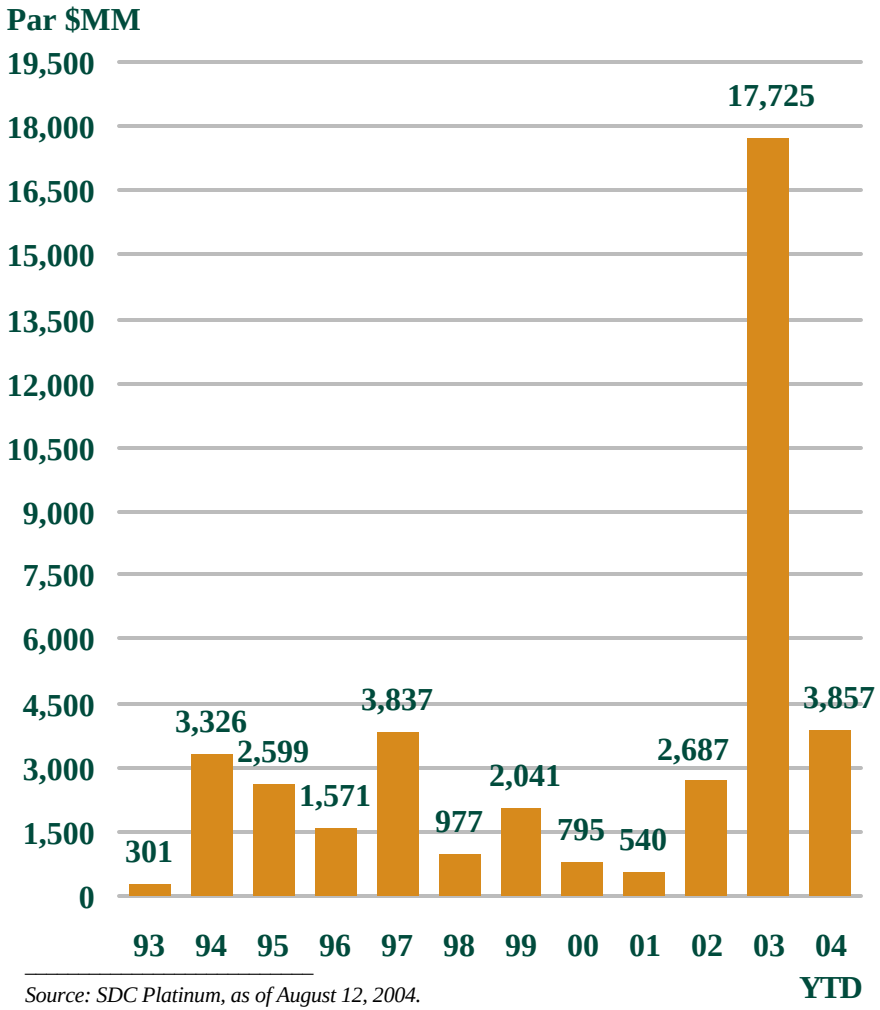
National POB Issuance

- In 1993, Sonoma County, CA started the first wave of POBs with its $97.4 million financing
- Since then, over $32 billion of POBs have been issued nationally
- In 2003 several States issued POBs
  - Illinois
  - Kansas
  - Wisconsin
  - Oregon

National POB Issuance by State



National POB Issuance



Source: SDC Platinum, as of August 12, 2004.

California POBs

- There have been $7.9 billion (25 transactions) POB financings completed in the State of California since 1994
- In 2003, 10 different California local governments issued $2.2 billion of POBs
- 2004 issuance has been robust
- Because of CalPERS' investment underperformance in FY 2001-03, PERS' members are facing a massive increase in employer contribution rates (0-25% of payroll)
  - Many PERS agencies are actively evaluating POBs

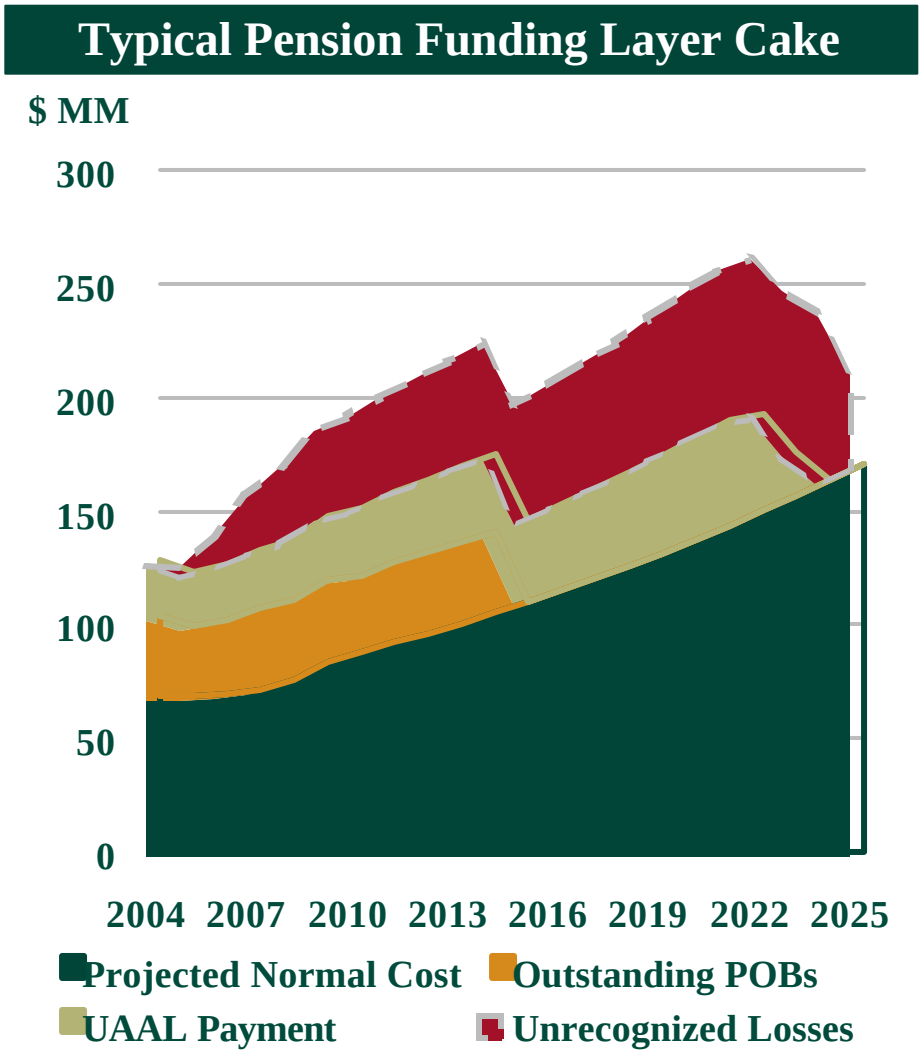
Sale Date	Issuer	Par $MM
12/04/86	Los Angeles County	461.493
10/20/93	Sonoma County	97.400
02/03/94	San Diego County	430.430
02/15/94	Contra Costa County	337.365
03/17/94	City of Fresno	245.555
04/21/94	City of Chula Vista	16.787
09/23/94	Orange County	110.200
09/23/94	Orange County	209.840
10/13/94	Los Angeles County	248.395
10/13/94	Los Angeles County	600.000
10/13/94	Los Angeles County	1,116.835
04/12/95	Alameda County	310.150
06/22/95	Sacramento County	134.000
06/22/95	Sacramento County	404.060
07/28/95	City of Santa Rosa	8.665
09/13/95	Stanislaus County	108.970
10/19/95	Los Angeles County	600.000
10/25/95	City of Long Beach	108.635
11/10/95	Kern County	227.818
11/22/95	San Bernardino County	420.527
11/30/95	Ventura County	154.510
04/24/96	Los Angeles County	327.400
06/06/96	Orange County	121.680
12/09/96	Mendocino County	30.720
12/12/96	Alameda County	306.863
01/07/97	Orange County	136.923
02/14/97	City of Oakland	436.289
05/15/97	Tulare County	41.460
11/19/97	Imperial County	35.175
03/12/98	Fresno County	184.910
04/22/98	City of Bell	1.870
05/19/98	City of Berkeley	12.415
06/24/98	Trinity County	9.140
02/03/99	Merced County	63.070
07/29/99	City of Pasadena	50.735

CalPERS member

Sale Date	Issuer	Par $MM
07/29/99	City of Pasadena	51.205
11/03/99	City of Richmond	36.280
07/11/00	City of Fresno	52.800
07/11/00	City of Fresno	52.850
07/11/00	City of Fresno	52.850
07/11/00	City of Fresno	52.850
03/08/01	Contra Costa County	107.005
06/05/01	Imperial Irrigation District	75.000
06/13/01	City of South Gate	8.500
10/03/01	City of Oakland	195.639
01/23/02	City of Fresno	205.335
03/13/02	Fresno County	117.055
08/09/02	City of Long Beach	43.950
08/09/02	City of Long Beach	44.000
09/06/02	Imperial County	33.265
09/17/02	San Diego County	737.340
12/12/02	Mendocino County	91.945
04/23/03	Contra Costa County	322.710
05/07/03	Marin County	112.805
05/14/03	Sonoma County	231.200
05/15/03	Kern County	238.177
06/26/03	San Luis Obispo County	137.194
07/09/03	City of Santa Rosa	50.670
07/15/03	Sacramento County	152.321
03/10/04	Fresno County	402.898
06/10/04	Solano County	96.665
06/11/04	San Bernardino County	463.895
06/17/04	Union City	22.998
06/15/04	CSCDA Pool	197.084
06/18/04	South Coast Air Qual. Mgmt Dis	47.030
06/22/04	City of Burbank	25.120
06/24/04	Sacramento County	426.131
06/28/04	San Diego County	454.113
06/29/04	City of Pomona	38.000
08/05/04	City of Pasadena	40.000
	Total Par Amount	**13,527.165**

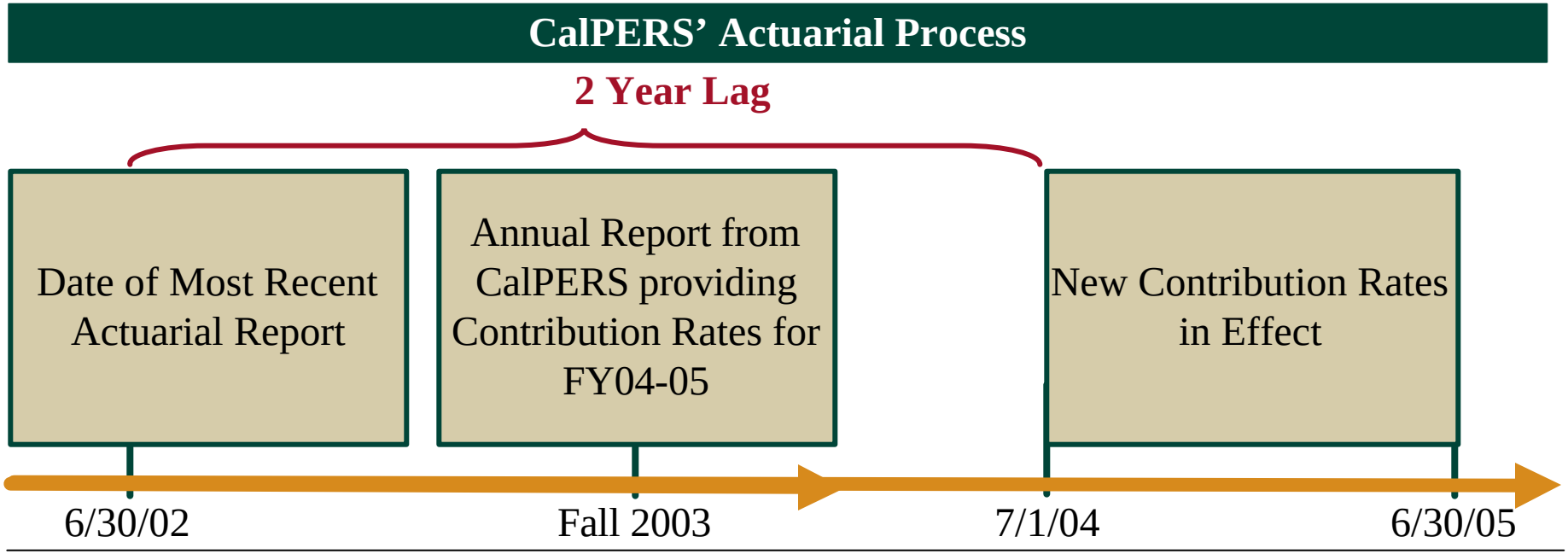
Understanding the Whole Pension Funding Picture

- UAAL only one piece of Pension Funding Program – normal cost and unrealized losses
- Typical actuarial smoothing methodologies result in a lagging liabilities
- Many plans have a 5 year smoothing approach (CalPERS is 3 years) whereby unrealized losses are phased in at 20% annually, and are not bondable until actuarially realized
- Although they are not bondable, unrealized losses present a significant rating/disclosure issue



Impact of Lagging Valuations & Smoothing Methodologies

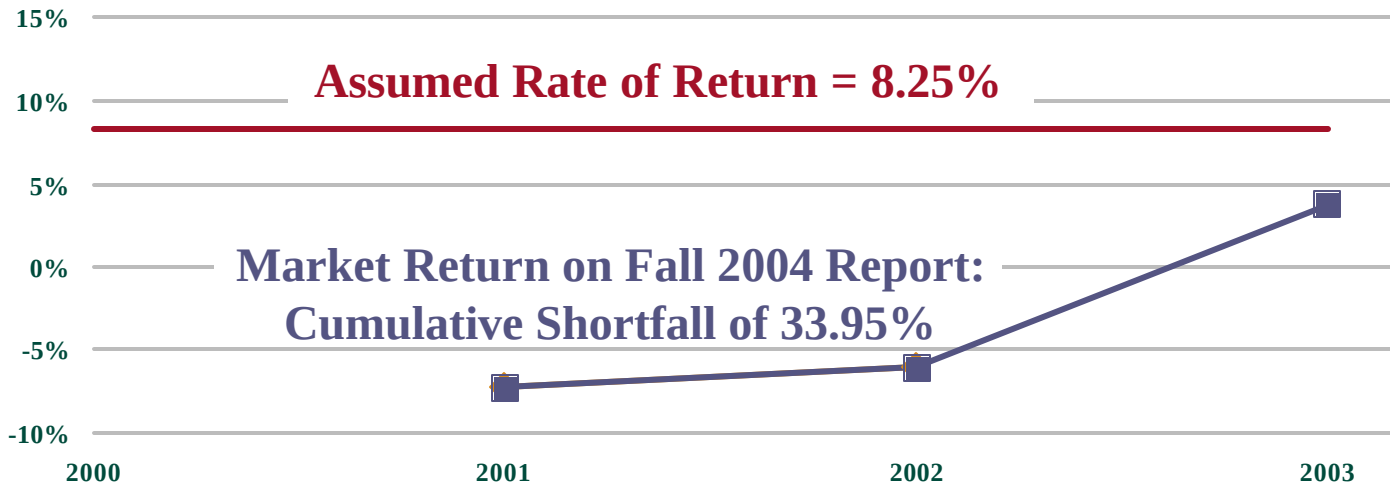
- Under existing CalPERS procedures, each Fall the member agency receives an annual report from CalPERS indicating its required contribution rates for the next fiscal year, *based upon actuarial valuations approximately 18 months earlier*
  - Inherent in this methodology is a 2 year lag between actuarial asset values and market returns



Impact of Lagging Valuations & Smoothing Methodologies

- Reports issued in Fall 2003, which set employer contributions for FY 2004-05, reflect 3 years ending 6/30/02
- PERS' member agencies should expect *further* contribution increases in FY 2005-06 reflecting three years ended 6/30/03
  - Additional impact of lowering rate to 7.75%

Assumed Rate of Return vs. Actual Market Return

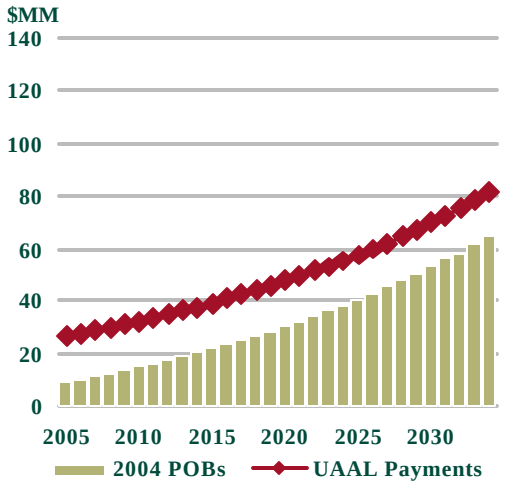


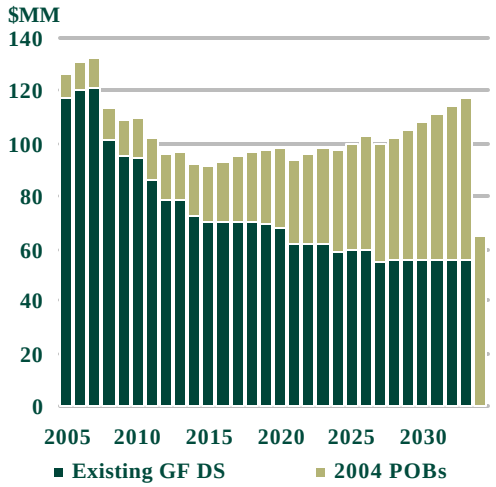
Market Return	
2000	10.5%
2001	-7.2%
2002	-6.0%
2003	3.7%

Structuring Considerations

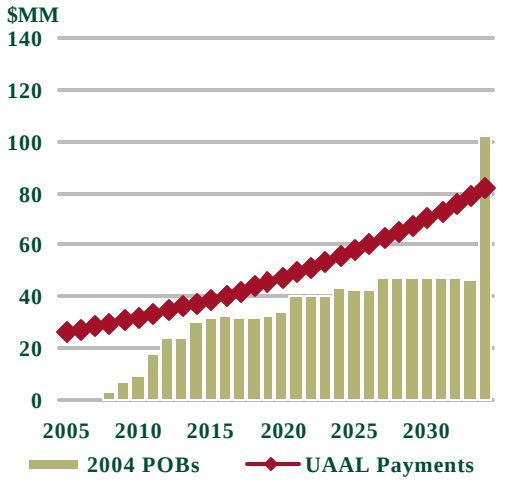
- **How to integrate POBs into macro pension funding plan?**
  - How much to bond?
- **How to integrate POBs into macro debt management policies?**
  - Shape of debt service
  - Fixed vs. variable
  - Call features

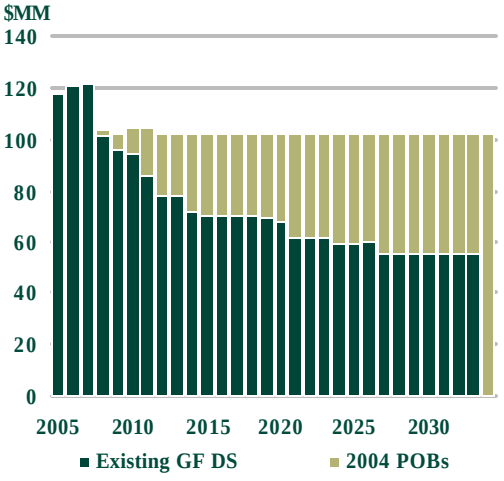
Prior UAAL as Benchmark





Wrapped Debt Service





POB Market Environment

POBs Remain Cost-Effective for Plan Sponsors

- 30-year POB financing <= 6% is still viable
- Adding an element of variable rate debt can further enhance POB economics and provide cost-effective callability

Current POB Pricing (1)

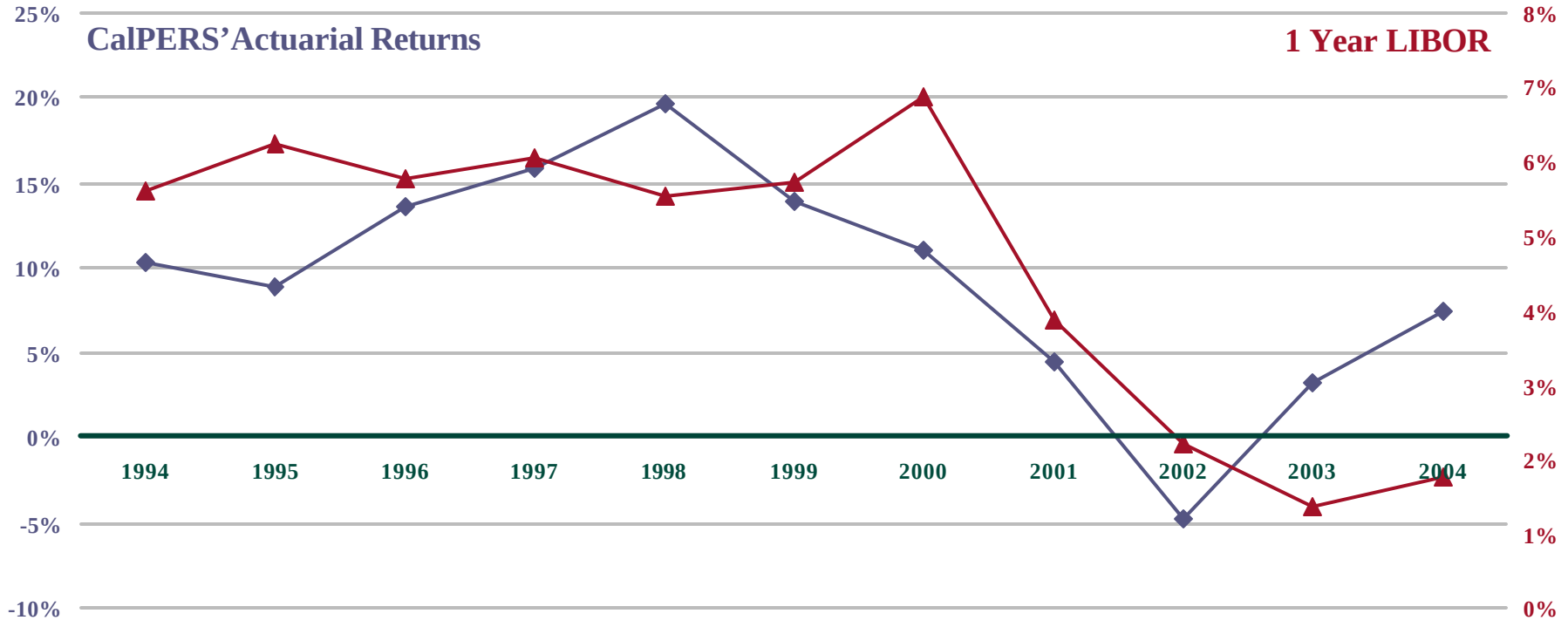
	Current Interest Bonds				Capital Appreciation Bonds			
Maturity	Benchmark	T-Yield	Spread	Yield	Benchmark	T-Strip	Spread	Yield
9/1/2005	5/05 6.500%	1.830%	0.150%	1.980%	8/15/2005	2.020%	0.500%	2.520%
9/1/2006	5/06 4.625%	2.360%	0.400%	2.760%	8/15/2006	2.530%	0.600%	3.130%
9/1/2007	5/07 4.375%	2.810%	0.500%	3.310%	8/15/2007	2.990%	0.650%	3.640%
9/1/2008	5/08 5.625%	3.140%	0.550%	3.690%	8/15/2008	3.290%	0.650%	3.940%
9/1/2009	7/09 3.625%	3.390%	0.600%	3.990%	8/15/2009	3.630%	0.650%	4.280%
9/1/2010	8/11 5.000%	3.910%	0.630%	4.540%	8/15/2010	3.900%	0.650%	4.550%
9/1/2011	8/11 5.000%	3.910%	0.650%	4.560%	8/15/2011	4.120%	0.650%	4.770%
9/1/2012	8/12 4.375%	4.080%	0.650%	4.730%	8/15/2012	4.320%	0.680%	5.000%
9/1/2013	8/13 4.250%	4.230%	0.650%	4.880%	8/15/2013	4.490%	0.680%	5.170%
9/1/2014	8/13 4.250%	4.230%	0.650%	4.880%	8/15/2014	4.650%	0.700%	5.350%
9/1/2015	8/13 4.250%	4.230%	0.750%	4.980%	8/15/2015	4.780%	0.700%	5.480%
9/1/2016	8/13 4.250%	4.230%	0.850%	5.080%	8/15/2016	4.940%	0.700%	5.640%
9/1/2017	8/13 4.250%	4.230%	0.900%	5.130%	8/15/2017	5.050%	0.700%	5.750%
9/1/2018	8/13 4.250%	4.230%	0.950%	5.180%	8/15/2018	4.160%	0.700%	4.860%
9/1/2019	8/13 4.250%	4.230%	0.980%	5.210%	8/15/2019	5.260%	0.700%	5.960%
9/1/2020					8/15/2020	5.330%	0.700%	6.030%
9/1/2021					8/15/2021	5.390%	0.700%	6.090%
9/1/2022					8/15/2022	5.450%	0.700%	6.150%
9/1/2023					8/15/2023	5.470%	0.700%	6.170%
9/1/2024	2/31 5.375%	5.070%	0.500%	5.570%	8/15/2024	5.500%	0.700%	6.200%
9/1/2025					8/15/2025	5.510%	0.700%	6.210%
9/1/2026					8/15/2026	5.530%	0.700%	6.230%
9/1/2027					8/15/2027	5.530%	0.700%	6.230%
9/1/2028					8/15/2028	5.530%	0.700%	6.230%
9/1/2029					8/15/2029	5.530%	0.700%	6.230%
9/1/2030					8/15/2030	5.530%	0.700%	6.230%
9/1/2031					8/15/2031	5.530%	0.700%	6.230%
9/1/2032					8/15/2032	5.530%	0.700%	6.230%
9/1/2033					8/15/2033	5.530%	0.700%	6.230%
9/1/2034					8/15/2034	5.530%	0.700%	6.230%
9/1/2035	2/31 5.375%	5.070%	0.650%	5.720%	8/15/2035	5.530%	0.700%	6.230%

(1) As of August 12, 2004.

The Case for Variable Rate

- Maintain call flexibility
- Lower overall cost
- Better nexus between assets (Pension fund) & liabilities (POBs)?

CalPERS' Actuarial Investment Return vs. 1 Year LIBOR

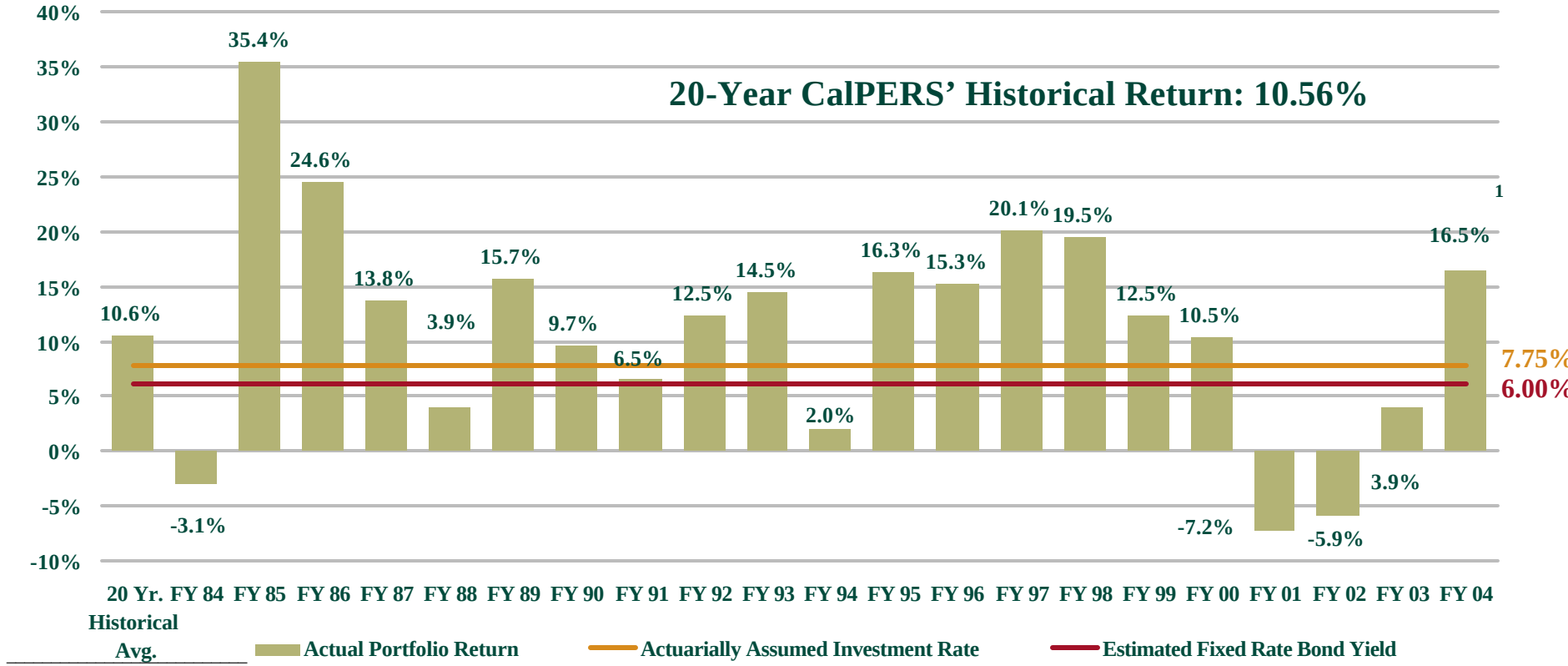


** Beginning 6/30/02 performance figures are reported as gross offees.*
Source: CalPERS and Lehman Brothers

Potential Risks of POBs

- New benefits and other actuarial dynamics can create a new UAAL
- Underperformance of pension system investments vs. POB Cost of Funds
  - Market timing risk increases with lump sum investment

CalPERS' Historical Investment Return vs. 7.75% Earnings Assumption

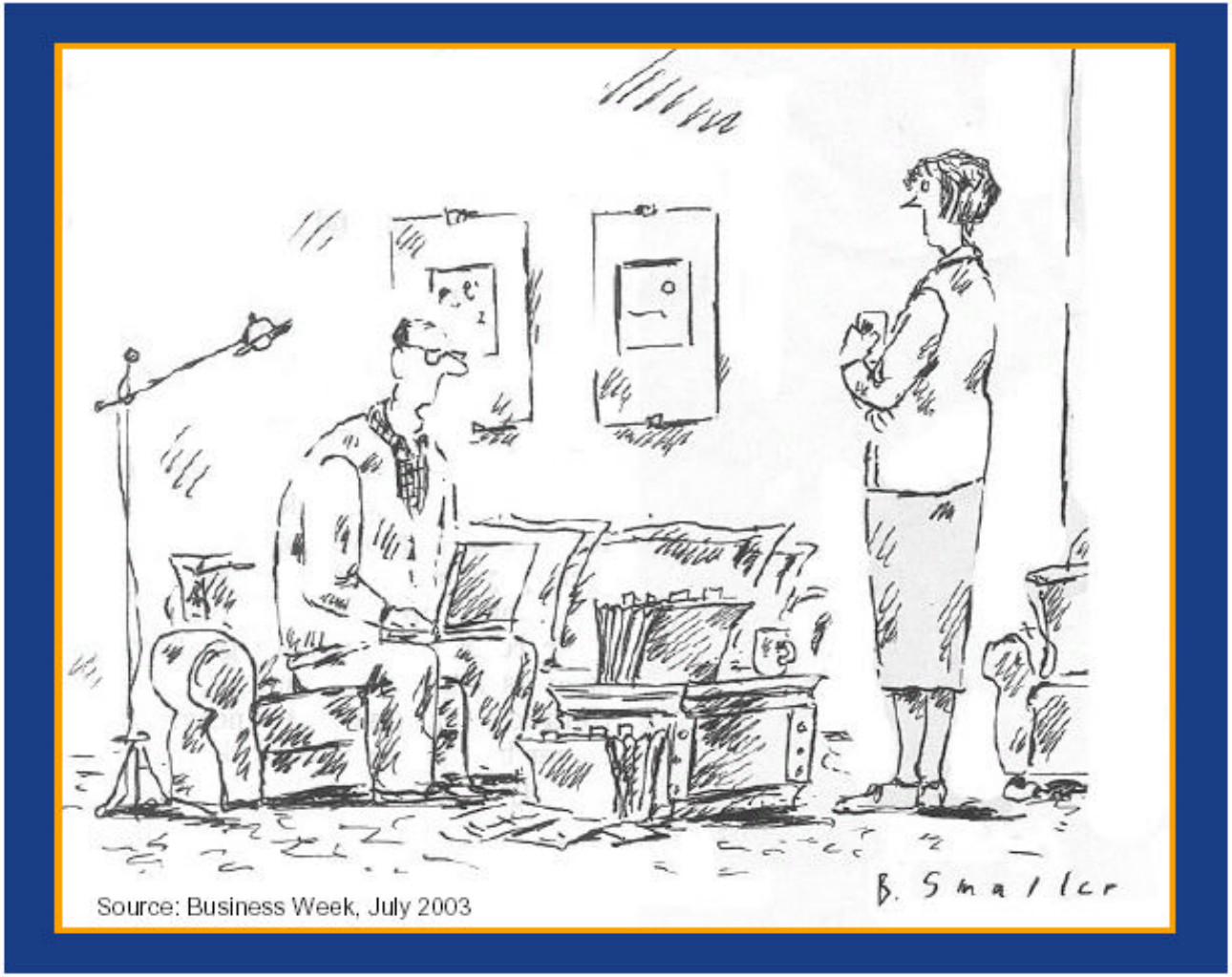


- *6.00% represents an assumed fixed rate bond yield, a portion may be variable.*
- *Historical average is a geometric average based on all available CalPERS' published returns data. Beginning 6/30/02 performance figures are reported as gross of fees. Source: CalPERS*

1. *Through 6/30/04*

Not a Recommended Approach:

"If we take a late retirement and an early death, we'll just squeak by."



Source: Business Week, July 2003